

## APPENDIX D. Glossary

**Acceptable biological catch (ABC):** The ABC is a scientific calculation of the sustainable harvest level of a fishery as determined by Federal fisheries biologists.

**Acoustic Doppler current profiler (ADCP):** An acoustic sensor that measures the Doppler shift of acoustic scatterers in the water column and estimates the magnitude and direction of 3-D motions of the "water" versus depth, using the assumption that the scatterers are passive tracers of the water mass. Fisheries scientists have applied this sensor to look for biological constituents (i.e., eggs and larvae) in the water column.

**Adaptive management:** A combination of stock assessments with prior knowledge of the fishery coupled with quantitative modeling and empirical management experimentation.

**Anadromous:** Fish stocks that migrate from saltwater to fresh water to spawn.

**Anthropogenic:** Human caused; usually used in reference to risks created to fish stocks by human activities.

**Atlantic Coastal Cooperative Statistics Program (ACCSP):** A cooperative state-federal marine and coastal fisheries data collection program. The goal of the program is to cooperatively collect, manage, and disseminate fishery statistical data and information for the conservation and management of fishery resources of the Atlantic coast and to support the development and operation of a national data collection and data management program.

**Benthic:** Refers to organisms which live at or near the bottom (see Demersal).

**Biomass:** The total weight of organisms in a defined group, such as a fish stock or year class.

**Broodstock:** Adult fish used to propagate the subsequent generation of hatchery fish.

**Bycatch:** The Magnuson-Stevens Fishery Conservation and Management Act defines **bycatch** as "fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards... [But not] fish released alive under a recreational catch and release fishery management program."

**Bycatch reduction device (BRD):** Any of a number of implements that have been certified to reduce the likelihood of capturing non-target species.

**Catch per unit effort (CPUE):** The amount of fish that is caught by a given amount of fishing effort. Typically, effort is a combination of gear type, gear size, and length of time the gear is used.

**Charter fishing:** Fishing from a vessel carrying a passenger(s) for hire who is engaged in recreational fishing.

**Commercial fishing:** Fishing in which the fish harvested, either in whole or in part, are intended to enter commerce or enter commerce through sale, barter, or trade.

**Conservation engineering:** The practice of determining the modification in gear design that will meet conservation objectives, such as decreasing bycatch and bycatch mortality by increasing the selectivity of gear and increasing the survival of fish and other living marine resources that fishing gear encounter inadvertently.

**Continental shelf:** Submerged margin of continent from low-tide line to a point (generally between the 50 and 100 fathom isobaths) at which there is a marked increase of slope (i.e., the continental slope) to greater depth.

**Delisting criteria:** Determination as to what indicators need to exist before stocks can be taken off the list of endangered species. Typically, delisting criteria are elaborated by policy decisions regarding various recovery activities, such as reforming hatchery practices, reducing harvest, eliminating impacts of dams or restoring habitat.

**Demersal:** Fish and animals that live near the bottom of an ocean.

**Endangered species:** A species is considered "endangered" if it is in danger of extinction throughout a significant portion of its range; it is considered "threatened" if it is likely to become an endangered species.

**Endangered Species Act (ESA):** The Federal law, enacted by Congress in 1973, to provide protection for, and promote recovery of, animal and plant species considered as threatened or endangered because of natural or anthropogenic conditions.

**Essential fish habitat (EFH):** The Magnuson-Stevens Fishery Conservation and Management Act defines essential fish habitat as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."

**Evolutionarily significant unit (ESU):** An ESU represents a distinct population segment under the that (1) is substantially reproductively isolated from nonspecific populations and (2) represents an important component of the evolutionary legacy of the species.

**Exclusive Economic Zone (EEZ):** The zone contiguous to the territorial sea of the United States, the inner boundary of which is a line coterminous with the seaward boundary of each of the coastal states and the outer boundary of which is a line drawn in such a manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured. This zone was established by Proclamation Numbered 5030, dated March 10, 1983.

**Exploitation rate:** The probability that a given fish will die during the year because of fishing.

**Ex-vessel value:** The amount paid to vessel's owner or operator for its catch, excluding any value added by at-sea processing.

**Fishery:** (a) One or more stocks of fish which can be treated as a unit for purposes of conservation and management and which are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics; and (b) any fishing for such stocks.

**Fishery dependent data:** Data collected on a fish or a fishery from sport fishers, commercial fishers, and seafood dealers.

**Fishery independent data:** Data collected on fish by scientists who catch the fish themselves, rather than depending on fishermen or seafood dealers.

**Fishery management council (FMC):** One of eight regional groups established under Section 302 of the Magnuson-Stevens Fishery Conservation and Management Act to prepare and oversee fishery management plans for fisheries conducted principally within the Exclusive Economic Zone.

**Fishery management plan (FMP):** A plan developed by a regional fishery management council, or the Secretary of Commerce under certain circumstances, to manage a fishery resource in the U.S. EEZ pursuant to the Magnuson-Stevens Fishery Conservation and Management Act. Includes data, analyses, and management measures for a fishery.

**Gillnet:** A flat net suspended vertically in the water used to capture fish which entangle themselves in the net, usually by the forward part of the body near the gills.

**Groundfish:** A species of fish, usually finfish, that live on or near the sea bottom part of the time.

**Juvenile:** A young fish, usually resembling an adult in appearance, but which has not yet become sexually mature.

**Krill:** Small abundant crustaceans that form an important part of the food chain in Antarctic waters.

**Landings:** The number or poundage of fish unloaded at a dock by commercial fishers or brought to shore by recreational fishers for personal use. Landings are reported at the points at which fish are brought to shore.

**Marine Mammal Protection Act (MMPA):** The MMPA is a statute which was enacted in 1972 to protect marine mammals and their habitat. These species include whales, dolphins, seals, seal lions, walruses, and others.

**Mark-recapture:** The tagging and releasing of fish to be recaptured later in their life cycles. These studies are used to study fish movement, migration, mortality, and growth, and to estimate population size.

**Maximum Sustainable Yield (MSY):** A management goal specifying the largest long term average catch or yield (in terms of weight of fish) that can be taken, continuously (sustained)

from a stock or stock complex under prevailing ecological and environmental conditions, without reducing the size of the population.

**Metapopulation:** A group of partially isolated populations (or subpopulations) belonging to the same biological species (or subspecies) and connected by migratory pathways. These partially isolated populations or subpopulations can exchange individuals, which are potentially able to recolonize sites within the metapopulation from which the species or subspecies recently became extinct.

**Pinger:** High-frequency acoustic devices that may keep marine mammals from entering and becoming entangled in fishing nets.

**PIT-tag:** The passive integrated transponder (PIT) tag is an electronic tag 10 mm long by 2.1 mm in diameter that can be coded with one of 35 billion codes. The tag can be automatically detected and decoded *in situ* and eliminates the need to sacrifice, anesthetize, handle, or restrain fish during data retrieval. The tag has been developed as a research and management tool for monitoring the movement of juvenile and adult fish species.

**Plankton:** Plants (phytoplankton) and animals (zooplankton) which float in the upper portion of the water column and provide the basic constituents of the oceanic food web. Most planktonic organisms are microscopic in size. Eggs and larvae of many fisheries species are also components of the plankton community.

**Population:** A group of interbreeding organisms generally inhabiting a given geographic area.

**Opportunity cost:** An amount a fisher could earn for his/her time and investment in another business or occupation.

**Optimum yield (OY):** (a) The amount of fish which will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems; (b) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor; and (c) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

**Quota:** The maximum amount of fish that can be legally landed in a time period. It can apply to the entire fishery, an individual fisher's share under an individual fishing quota (IFQ) system, or refer to the size of fish.

**Recreational Fisheries Information Network (RecFIN):** A cooperative state-Federal effort among marine fisheries agencies to improve collection and management of marine recreational fisheries statistical information.

**Recruitment:** A measure of the weight or number of fish which enter a defined portion of stock, such as the fishable stock or the spawning stock.

**Regulatory impact review (RIR):** The part of a federal fishery management plan that describes impacts resulting from the plan.

**Relative abundance:** An index of fish population abundance used to compare fish populations from year to year. This does not measure the actual numbers of fish, but shows changes in the population over time.

**Saltonstall-Kennedy Grant Program:** A competitive program that provides funds through grants or cooperative agreements for research and development projects to benefit U.S. fishing industry. The Saltonstall-Kennedy Act, as amended [15 U.S.C. 713 (c) (3)], is the program's statutory authority.

**Stakeholder:** One who is expected to receive economic or social benefits from the conservation and management of living marine resources.

**Stock:** A more-or-less discrete and identifiable unit of fish or other exploited species, often referring to a management unit.

**Stock assessment:** The biological assessment of the status of the resources. This analysis provides the official estimates of stock size, spawning stock size, fishing mortalities, recruitment, and other parameters.

**Stock assessment workshop (SAW):** A cooperative stock assessment activity in which scientists from various agencies evaluate the status of fish stocks.

**Subsistence fishing:** Fishing for personal consumption or traditional/ceremonial purposes.

**Technical Recovery Team (TRT):** A panel of scientists set up to define "delisting criteria" in specific geographic domains for endangered salmon and steelhead species on the west coast.

**Trophic web:** The network that represents the predator/prey interactions of an ecosystem.

**Turtle excluder device (TED):** An implement that has been certified to reduce the likelihood of capturing turtles.

**Yield-per-recruit:** The average weight of fish ultimately harvested for each fish that enters the fishery.

**Virtual population analysis:** A mathematical analysis in which catch data are used to estimate absolute abundances of age-classes in a stock and the fishing mortality that has been sustained by those age-classes.